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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/575,891

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Thomas Reichmann

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FITCH, EVEN, TABIN & FLANNERY
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EXAMINER

TEIXEIRA MOFFAT, JONATHAN CHARLES

ART UNIT

PAPER NUMBER

2863

MAIL DATE

DELIVERY MODE

04/21/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/575,891	Applicant(s) REICHMANN, THOMAS	
	Examiner JONATHAN TEIXEIRA MOFFAT	Art Unit 2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/14/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The examiner notes that the specification and claims contain reference to a drawing which has not been submitted for the file record. The specification makes reference to the same items (for instance on page 6) but does not state that a drawing should have been included. Applicant is required to remove all of these reference numerals.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on 10/17/2003. It is noted, however, that applicant has not filed a certified copy of the German application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michi (US pat pub 20020165650) in view of Alland (US pat 5964822).

With respect to claim 1, Michi discloses an apparatus comprising:

1) A rotational speed sensor which outputs a signal which is dependent on the rotational speed about the vertical axis (Fig 4 item 45).

2) A signal evaluation means which determines the rotational speed from the signal supplied by the rotational speed sensor (Fig 4 items 42 and 43).

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3) A radiation sensor (Fig 4 item 41) for sensing an angle (Fig 1) of an object located in the region ahead of the vehicle relative to the vehicle the data from the radiation sensor being supplied to the signal evaluation means in order to sense the angle and being taken into account in the compensation of the offset error of the rotational speed sensor (paragraphs 0007 and 0009).

With respect to claim 1, Michi fails to disclose:

3) Compensation using a preceding vehicle, characterized in that only signals of the rotational speed sensor at which the angle of the preceding vehicle located in the region ahead of the vehicle is approximately 0 degrees are used to determine the offset error.

Alland teaches, with respect to claim 1:

3) Compensation using a preceding vehicle (column 1 line 62-column 2 line 10), characterized in that only signals of the rotational speed sensor at which the angle of the preceding vehicle located in the region ahead of the vehicle is approximately 0 degrees are used to determine the offset error (Fig 1 and column 2 lines 29-53). *Alland describes this as an ideal situation.*

One of ordinary skill in the art at the time of applicant's invention would have found it obvious to modify the apparatus of Michi by applying calibration to a moving object such as a preceding vehicle and to perform calibration when the preceding vehicle is directly ahead and at an approximately zero heading angle difference as taught by Alland. While it is true that the goal of Alland is to correct the misalignment of the radar itself, it is still directed to the endeavor of correcting vehicle sensors using a radar and a target. Michi presents one of the primary advantages of that system to be the fact that it is operable while the vehicle is in motion

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(paragraph 0009) and that switching of target objects is possible (paragraph 0016). Alland discloses that the system works equally well with either stationary or moving target vehicles (column 1 lines 62-67). One of ordinary skill in the art would see the benefit of not requiring the system of Michi to find a stationary object and instead operate on a moving object such as a preceding vehicle. One of ordinary skill in the art would further acknowledge that, from a technical standpoint, it would require no more than routine application of vector geometry to modify the method of Michi (Fig 2 for instance) to include moving targets.

With respect to claim 2, Michi discloses that only the signals of the rotational speed sensor which are sensed in a predefined time interval are used to determine the offset error and are averaged over the signals of the rotational speed sensor which are sensed in the predefined time interval (paragraph 0048 and Fig 3 item 36 and Fig 4 item 43).

With respect to claim 3, Michi discloses that the change in the rotational speed of the rotational speed sensor can be determined over time in order to draw conclusions about the stability of the rotational speed (paragraph 0016). *Here Michi indicates that statistical processing of the yaw values is desirable. While not specifically citing "stability", the rotational speed sensor is clearly "determined over time" and "can" be used in order to draw conclusions, i.e. is capable of being used thusly.*

With respect to claim 4, Michi discloses that the angle of the preceding vehicle located in the region ahead of the vehicle can be determined in relation to the longitudinal axis of the vehicle (Figs 1-2).

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With respect to claim 5, Michi fails to disclose a preceding vehicle as the target wherein the actual speed of the preceding vehicle being greater than or less than the actual speed of the vehicle.

Alland teaches, with respect to claim 5, that the vehicle and the preceding vehicle move in the same direction of travel (Fig 1), the actual speed of the preceding vehicle being greater than or less than the actual speed of the vehicle (Fig 1 and column 2 lines 29-53).

One of ordinary skill in the art at the time of applicant's invention would have found it obvious to modify the apparatus of Michi by applying calibration to a moving object such as a preceding vehicle and to perform calibration when the preceding vehicle is directly ahead and at an approximately zero heading angle difference as taught by Alland. While it is true that the goal of Alland is to correct the misalignment of the radar itself, it is still directed to the endeavor of correcting vehicle sensors using a radar and a target. Michi presents one of the primary advantages of that system to be the fact that it is operable while the vehicle is in motion (paragraph 0009) and that switching of target objects is possible (paragraph 0016). Alland discloses that the system works equally well with either stationary or moving target vehicles (column 1 lines 62-67). One of ordinary skill in the art would see the benefit of not requiring the system of Michi to find a stationary object and instead operate on a moving object such as a preceding vehicle. One of ordinary skill in the art would further acknowledge that, from a technical standpoint, it would require no more than routine application of vector geometry to modify the method of Michi (Fig 2 for instance) to include moving targets.

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Further, as the unmodified apparatus of Michi utilizes a stationary target (where the actual speed is certainly less than the actual speed of the vehicle) this situation should be even easier to adapt using the teachings of Alland.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JONATHAN TEIXEIRA MOFFAT whose telephone number is (571)272-2255. The examiner can normally be reached on Mon-Fri, from 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/jtm/
JTM
4/7/2009

/Bryan Bui/
Primary Examiner, Art Unit 2863